**Eddie Aguilar**

**Secante**

>> function secante

M = ["Iteración" "X0" "f(X0)" "x1" "f(X1)" "X2" "Error"];

y = input("Ingresa tu función a resolver:","s")

x0 = input("Ingresa tu valor de x0:")

x1 = input("Ingresa tu valor de x1:")

Erel = input("Ingres el error que quieres alcanzar:")

iteracion = 0;

error\_calculado = 1;

N(1,1)= iteracion;

N(1,2) = x0;

N(1,4)= x1;

x=N(1,2);

Z = eval(y);

N(1,3)=Z;

x=N(1,4);

Z = eval(y);

N(1,5)=Z;

x2 = N(1,4)-(N(1,5)\*(N(1,2)-N(1,4)))/(N(1,3)-N(1,5));

N(1,6)= x2;

N(1,7)= error\_calculado

i = 2;

while error\_calculado > Erel

iteracion = iteracion + 1;

N(i,1) = iteracion;

N(i,2) = N(i-1,4);

x = N(i,2);

Z = eval(y);

N(i,3)=Z;

N(i,4) = N(i-1,6);

x = N(i,4);

Z = eval(y);

N(i,5)=Z;

x2 = N(i,4)-(N(i,5)\*(N(i,2)-N(i,4)))/(N(i,3)-N(i,5));

N(i,6)= x2;

error\_calculado = abs((N(i,6)-N(i-1,6))/N(i,6));

N(i,7) = error\_calculado

i = i+1

end

disp(M)

disp(N)

end

A screenshot of a computer

Description automatically generated